

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims

1-27. (Cancelled).

28. (New) A method for managing the respective processing loads of a plurality of processors in a processor network, comprising the steps of:

a first network management processor issuing a processing load information collection message to an adjacent processor;

said adjacent processor adding into the message its analyzed processing load information and forwarding said message to yet another processor of the processor network which repeats the adding and forwarding functions; wherein,

a processor forwards the message with the added processing load information to the first network management processor, which determines, on the basis of the processing load information of the processors stored in said processing load information collection message, a load balancing technique for load distribution among the processors in said processor network.

29. (New) The method according to claim 28, in which said processing load information collection message is a first processing load exploration program unit, wherein said processing load exploration program unit analyses the respective processing load of each of the processors to which it is forwarded and stores corresponding processing load information.

30. (New) The method according to claim 29, wherein said first network management processor determines as said load balancing technique a respective load balancing method for each of said processors.

31. (New) The method according to claim 30, wherein at least one of said processors has stored a plurality of load balancing methods and said first network management processor sends a load balancing method activation message to said at least one processor for activating the load balancing method determined for the processor.

32. (New) The method according to claim 31, wherein, prior to said first network management processor sending said load balancing method activation message to said at least one processor for activating the load balancing method determined for the processor, said first network management processor determines whether said load balancing method determined for the processor is presently stored at said processor.

33. (New) The method according to claim 31, wherein said first network management processor sends a load balancing method implementation message, including the respective determined load balancing method, and said at least one processor implements and activates said included load balancing method.

34. (New) The method according to claim 29, wherein said first processing load exploration program unit determines at each processor whether the processor is a network management processor or not.

35. (New) The method according to claim 29, wherein said first processing load exploration program unit is passed from processor to processor in accordance with a predetermined order of processors.

36. (New) The method according to claim 29, wherein said first processing load exploration program unit is passed from processor to processor in a predetermined group of processors.

37. (New) The method according to claim 29, wherein at least one further processing load exploration program unit is passed from processor to processor in parallel with said first processing load exploration program unit.

38. (New) The method according to claim 37, wherein said first processing load exploration program unit and said further processing load exploration program unit are passed from processor to processor in different sequences.

39. (New) The method according to claim 28, wherein said plurality of processors comprises at least one further network management processor.

40. (New) A network including a network management processor and a plurality of networked processors and having incorporated a load balancing technique for managing processing loads amongst said networked processors, wherein:

a) a processing load information collection message is provided including an instruction unit for initiating an analysis of processing loads at a processor and a storage unit for storing processing load information about the analyzed processing loads;

b) each processor has a reception unit for receiving said processing load information collection message, a processor for running said received exploration program unit, and a transmission unit for forwarding said processing load information collection message to a next processor; and,

c) said network management processor has a transmission unit for transmitting said processing load information collection message to a first processor in the processor network, and a reception unit for receiving said processing load information collection message from a processor and a determining unit to determine, on the basis of the processing load information of the processors stored in said load exploration program unit storage section, a load balancing technique for load distribution among the processors in said processor network.

41. (New) The network according to claim 40 wherein said processing load information collection message is a processing load exploration program unit, and said instruction unit of said processing load information collection message is an analysis program unit for performing an analysis of processing loads at a processor, and wherein said instruction unit of said processing load information collection message also causes the determining unit of said network management processor to determine said load balancing technique.

42. (New) The network according to claim 41, wherein said network management processor has a determining unit to determine as said load balancing technique a respective load balancing method for each of said processors.

43. (New) The network according to claim 41, wherein at least one of said processors has a storage unit to store a plurality of load balancing methods, and said network management processor is adapted to send a load balancing method activation message to said at least one processor for activating the load balancing method determined for the processor.

44. (New) The network according to claim 41, wherein said network management processor has a transmission unit to send to at least one processor a load balancing method implementation message including the respective determined load balancing method, and said at least one processor has a receiver unit to receive an to implement and activate said included load balancing method.

45. (New) The network according to claim 41, wherein said transmission unit and said reception unit of each of said processors respectively is adapted such that said processing load exploration program unit is passed from processor to processor in accordance with a predetermined order of processors.

46. (New) The network according to claim 36, wherein said transmission unit and said reception unit of each of said processors respectively is

adapted such that said processing load exploration program unit is passed from processor to processor in a predetermined group of processors.

47. (New) A processing load information collection unit for use in the management of the respective processing loads of a plurality of processors networked in a processor network, said processing load exploration collection unit comprising:

storage section and instruction section, said instruction section comprising:

a) a forwarding control section to cause said network management processor to issue said processing load information collection message to a first one of said plurality of processors, and then to cause each one of said plurality of processors to pass said processing load information collection unit to a further one of said plurality of processors respectively until it arrives again at said network management processor;

b) an analysis section to analyze the respective processing load of each of said processors to which it is forwarded on its reception thereby, the results of each such analysis being stored in said storage section; and,

c) a load balancing technique selection section to cause said network management processor on its reception thereby to determine, on the basis of the processing load information of the processors stored in said storage section, a load balancing technique for load distribution among the processors in said processor network.

48. (New) The processing load information collection unit according to claim 47, wherein said instruction section comprises a program unit which, when executed on the respective processors, is operative to:

a) cause said network management processor to issue said processing load information program unit to a first one of said plurality of processors, and then to cause each one of said plurality of processors to pass said processing load information program unit to a further one of said plurality of processors respectively until it arrives again at said network management processor;

b) analyze the respective processing load of each of said processors to which it is forwarded, the results of each such analysis being stored in said storage section; and,

c) cause said network management processor to determine, on the basis of the processing load information of the processors stored in said storage section, a load balancing technique for load distribution among the processors in said processor network.

49. (New) The processing load information collection unit according to claim 48, wherein it causes said network management processor to determine, on the basis of the processing load information of the processors stored in said storage section, a load balancing technique for load distribution among the processors in said processor network, for each of said processors.

50. (New) The processing load exploration program unit according to claim 48, wherein it further causes said network management processor, after said step of determining a load balancing technique, to send a load balancing method activation message to said at least one processor for activating the load balancing method determined for the processor.

51. (New) The processing load exploration program unit according to claim 48, wherein it further causes said network management processor, after said step of determining a load balancing technique, to send to at least one processor a load balancing method implementation message including the respective determined load balancing method, and said at least one processor implements and activates said included load balancing method.

52. (New) The processing load exploration program unit according to claim 48, wherein said processing load exploration program unit further has a determining unit to determine at each processor whether the processor is said network management processor or not.

53. (New) The processing load exploration program unit according to claim 48, wherein said instruction section is adapted to cause each one of said plurality of processors to pass said processing load exploration program unit to a further one of said plurality of processors respectively in accordance with a predetermined order of processors.

54. (New) The processing load exploration program unit according to claim 48, wherein said instruction section is adapted to cause each one of said plurality of processors to pass said processing load information collection message to a further one of said plurality of processors respectively in a predetermined group of processors.

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